DETAILED ACTION

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 03/24/11 has been entered.

2.   Claims 1-3, 5, 6 and 12-17 are pending. Currently no claims are in condition for allowance.

Drawings

3.   The drawing (FIG. 7) is objected to as failing to comply with 37 CFR 1.84(p)(4) because reference character "FIRST PN GENERATOR" has been used to designate both 120A and 120B. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 103

4.   Claims 1-3, 5, 6 and 12-17 are rejected under 35 U.S.C. 103(a) as being unpatentable

over McDonough (US 6,452,959 B1) in view of Czaja et al. (US 6,459,689 B1).

        Regarding claims 1, 12 and 15, McDonough discloses an apparatus, comprising: a first

PN generator (see fig. 4; PN sequence generator; column 8, line 29-column 9, line 62) to

generate a first PN sequence at a first offset (a first offset data associated with a first base

station, which is IS-95 system; column 10, line 65-column 11, line 2); a first spreader to receive

and spread a first pilot data with the first PN sequence (according to IS-95 standards, the short

code I-sequence is associated with polynomial $P_1(x) = X15 + X13 + X9 + X8 + X7 + X5 + 1$; and

the Q-sequence is associated with the polynomial $P_Q(x) = X15 + x12 + x11 + x10 + x6 + x5 + x4$

$+ x3 + 1$...;*column 12, line 64*-column 13, line 13); a second PN generator to generate a second

PN sequence at a second offset (a second offset data associated with a second base station,

which is IS-2000 system; column 10, line 65-column 11, line 2), wherein the first PN sequence is

generated form equation different form equations used to generate the second PN sequence

(column 12, line 62-column 13, line 13); and a second spreader to receive and spread a second

pilot data with the second PN sequence *(...the PN sequenc*e are defined to be truncates

sequences of a maximal length linear feedback shift register sequence based upon the

$P(x)=X20+X9+X530X3+1$...; column 13, lines 14-26).

        However, McDonough does not explicitly disclose first and second frequencies.

        Czaja teaches a CDMA cellular system that permit Mobile Assisted Handoff between

base stations that use different carrier frequencies by performing periodic searches of the

different carrier frequency base station pilots (Abstract Summary).

It would have been obvious to one ordinary skill in the art at the time the invention was made to use different frequencies, such as that suggested by Czaja, in the communication system (for example Fig. 10) of McDonough in order provide hard handoff between base stations where soft handoff is impossible.

Regarding claims 2 and 3, McDonough discloses wherein the first frequency uses a different CDMA format than the second frequency (IS-95 standard and IS-2000 standard; column 13, lines 7-20).

Regarding claims 5, 6, 13, 14, 16 and 17, McDonough discloses that according to IS-95 standards, the short code I-sequence is associated with polynomial $P_{I(x)} = X15 + X13 + X9 + X8 + X7 + X5 + 1$; and the Q-sequence is associated with the polynomial $P_{Q(x)} = X15 + x12 + x11 + x10 + x6 + x5 + x4 + x3 + 1$ (column 12, line 64-column 13, line 13).

Response to Arguments

5.   Applicant's arguments filed 03/24/11 have been fully considered but they are not persuasive. Applicant argues (Remarks, page 6) that "McDonough does not disclose making use of more than one pair of stored I and Q polynomial sequence at one time and thus, only a single spreader is taught or suggested. Only one spreader operable with sequences for a presently chosen standard at a particular time is needed for transmissions by the transceiver device of McDonough." Examiner respectfully traversed the argument. 1) What was in the argument (…sequence at one time…) was not in the claim language, therefore, the arguments are not persuasive. 2) McDonugh clearly discloses that the first and second offset data are associated

with <u>first and second</u> base station offsets respectively. First base station (first device) generates

the first PN sequence and the second base station (second device) generates the second PN

sequence. (3) The mobile station selects the appropriate data sequence(s) (i.e., IS-95 or IS-2000)

in response to control data which indicates the appropriate system in which to operate.

     In the second paragraph of page 7, Applicant describes the first and the second PN

generators such as illustrated in Fig. 7 of the instant application added in the amendment filed

march 16, 2009. However, the feature upon the Applicant relies (i.e., the "polynomial sequence

at one time" is not recited in the amended paragraph or in Fig. 7.

     Still on page 7, Applicant argues that McDonough does not explicitly teach first and

second pilot data, spreading that first and second pilot data, and further spreading those data

using respective first and second PN sequences as featured in claim 1. Examiner respectfully

disagrees. McDonough discloses that the first and second offset data are associated with <u>first and</u>

<u>second</u> base station offsets respectively. First base station (first device) generates the first PN

sequence and the second base station (second device) generates the second PN sequence. (3) The

mobile station selects the appropriate data sequence(s) (i.e., IS-95 or IS-2000) in response to

control data which indicates the appropriate system in which to operate. Each base station

comprised of pilots' waveforms and data waveforms.

     Applicant, also, argues that Czaja does not teach or suggest a first PN sequence…

generated form equations different form equations used to generate a second PN sequence. It is

respectfully submitted that the rejection is based on the combined teaching of McDonough

reference and the Czaja reference, and that the McDonough reference, as pointed out above does

teach this feature.

Examiner believes that the claims, given their broad reasonable interpretation, read on the references applied.

Conclusion

6.   This is a continuation of applicant's earlier amendment. All claims are drawn to the same invention claimed in the earlier amendment and could have been finally rejected on the grounds and art of record in the next Office action if they had been entered in the earlier amendment. Accordingly, **THIS ACTION IS MADE FINAL** even though it is a first action in this case. See MPEP § 706.07(b). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no, however, event will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to SABA TSEGAYE whose telephone number is (571)272-3091. The examiner can normally be reached on Monday-Friday (7:30-5:00), First Friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Hassan A. Phillips can be reached on (571) 272-3940. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

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information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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